

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

PCT

To:

see form PCT/ISA/220

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY
(PCT Rule 43bis.1)

Date of mailing
(day.month.year) see form PCT/ISA/210 (second sheet)

Applicant's or agent's file reference
see form PCT/ISA/220

FOR FURTHER ACTION
See paragraph 2 below

International application No
PCT/DK2004/000472

International filing date (day.month.year)
02.07.2004

Priority date (day.month.year)
04.07.2003

International Patent Classification (IPC) or both national classification and IPC
A01C1/04

Applicant
BENTLE PRODUCTS AG

1. This opinion contains indications relating to the following items:

- ☒ Box No I Basis of the opinion
- ☐ Box No II Priority
- ☐ Box No III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No IV Lack of unity of invention
- ☒ Box No V Reasoned statement under Rule 43bis 1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No VI Certain documents cited
- ☐ Box No VII Certain defects in the international application
- ☐ Box No VIII Certain observations on the international application

2. **FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66 1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220

3. For further details, see notes to Form PCT/ISA/220

Name and mailing address of the ISA:



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**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/DK2004/000472

Box No. I Basis of the opinion

- 1 With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
 - ☐ This opinion has been established on the basis of a translation from the original language into the following language , which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b))
- 2 With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
 - a type of material:
 - ☐ a sequence listing
 - ☐ table(s) related to the sequence listing
 - b. format of material:
 - ☐ in written format
 - ☐ in computer readable form
 - c time of filing/furnishing:
 - ☐ contained in the international application as filed.
 - ☐ filed together with the international application in computer readable form
 - ☐ furnished subsequently to this Authority for the purposes of search
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/DK2004/000472

Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	1-29
	No: Claims	
Inventive step (IS)	Yes: Claims	4,5,8,9,13,16,18,20-22,25,27
	No: Claims	1,2,3,6,7,10,11,12,14,15,17,19,23,24,26,28,29
Industrial applicability (IA)	Yes: Claims	1-29
	No: Claims	

2. Citations and explanations

see separate sheet

Re Item V.

- 1 The following documents are referred to in this communication:
D1: WO 00/00007 A (BENTLE PRODUCTS AG ; AHM POUL HENRIK (ES)) 6
January 2000
D2: US-A-5 372 885 (FINLAYSON MALCOLM F ET AL) 13 December 1994
- 2 INTERPRETATION OF CLAIMS 22 AND 29
 - 2.1 Method claim 22 has been interpreted as "A method for producing a seed tape according to one or more of the claims 1 to 20...", with the special technical features of the characterising portion of claim 22.
 - 2.2 Claims 23 to 28 are therefore considered to be dependent on any of the preceding claims with the exception of method claim 22.
 - 2.3 Claim 29 has been interpreted as "A web to be cut into juxtaposed seed tapes according to any of the claims 1 to 21 and 23 to 28,...".
- 3 INDEPENDENT CLAIM 1
 - 3.1 The applicant is reminded that words like "optionally" or "preferably" have no limiting effect on the scope of a claim and, therefore, the features following these expressions are to be regarded as entirely optional.
 - 3.2 The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of claim 1 does not involve an inventive step in the sense of Article 33(3) PCT.
Document D1 discloses (the references in parenthesis applying to this document):
 - A seed tape (1) including successively arranged germinating units (9), and which further includes at least one carrier strip (2) as well as at least one auxiliary layer (4) biodegradable, flexible, non-woven or film-like material (see page 5, lines 1-11) arranged on said carrier strip (2), and whereby each germinating unit (9) includes a mixture of granulated carrier (page 4, lines 1-5), at least one granulated additive (page 4, lines 6-19) in addition to one or more seeds (10), said mixture plus the seed(s) (10) being kept together to form at least one core portion in the germinating unit (9), whereby the core portion (9) made of said

mixture includes locally adhered fibres of one or more thermoplastic materials (page 4, lines 20-22) which form a coherent, open network for keeping the granules of the mixture together (page 3, lines 4-7).

From this, the subject-matter of independent claim 1 differs in that:
the fibres of one or more thermoplastic materials which form the network are bicomponent fibres.

- 3.1.1 The problem to be solved by the present invention may be regarded as:
improving the efficiency with which the granulates of the mixture are kept together.
- 3.1.2 Document D2 describes high performance bicomponent fibres made out of thermoplastic materials. By using these fibres as binder fibres the efficiency of the binding in the mixture would be certainly improved. The skilled man would use the fibres disclosed in D2 in combination with the features of D1 to solve the problem posed. No further modifications would be necessary to arrive to a seed tape according to claim 1.
- 4 Dependent claims 2, 3, 6, 7, 10, 11, 12, 14, 15, 17, 19, 23, 24, 26, 28 and 29 do not appear to contain any additional features which, in combination with the features of any claim to which they refer, involve an inventive step with respect to the prior art named in the present proceedings.
The reasons therefor are that the additional features of the said claims are either directly known from documents D1 or D2, or are a combination of features obvious to the man skilled in the art in consideration of the disclosure of the prior art named in the present proceedings, or they concern only minor modifications which lie within the normal practice of the man skilled in the art.
- 4 The additional combinations of features of dependent claims 4, 5, 8, 9, 13, 16, 18, 20, 21, 25 and 27 are not disclosed in their present form in any of the documents cited in the search report.

5 INDEPENDENT METHOD CLAIM 22

5.1 The document D1 is regarded as being the closest prior art to the subject-matter of method claim 22, and shows (the references in parentheses applying to this document):

- A method for producing a seed tape according to any of the claims 1 to 20 (see page 6, lines 5 to 26)

The subject-matter of claim 22 differs from this known method in that the carrier has been microencapsulated before it is placed in the core portion.

The subject-matter of claim 22 is therefore new (Article 33(2) PCT).

5.2 The problem to be solved by the present invention may be regarded as to achieve a better control of the particles forming the mixture.

5.3 The solution to this problem proposed in claim 22 of the present application is considered as involving an inventive step (Article 33(3) PCT) for the following reasons:

- none of the documents cited in the search report disclose or suggest a method for producing a seed tape in which the carrier has been microencapsulated before it is placed in the core portion.
- There are many different possibilities from which the skilled person would choose one to solve the problem posed. However the microencapsulation of the particles of the carrier requires a substantial modification of the method disclosed in D1 that would go beyond the inventive skills of the skilled person.